REMARKS

Claims 1 and 26-59 are pending. New claim 59 is supported by previous claims 1, 26, 28, 29, 33, 45, 41 and 47. No new matter has been entered.

Initially, as the Office Action has failed to address the majority of the arguments presented in the Appeal Brief filed August 24, 2005, all of the arguments presented therein are expressly incorporated herein.

I. Scher et al. in view of Schmoock

Claims 1 and 32 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Scher et al. (U.S. Patent No. 4,092,198) in view of Schmoock (U.S. Patent No. 5,344,692).

A. "a wear layer of UV or electron beam curing lacquer"

The Office Action asserts Scher et al. teaches "a method for the manufacture of a decorative surface element, which element comprises a base layer, a decor layer of a lacquer, and a wear layer," citing the Abstract thereof. However, as presented in the Appeal Brief (and not addressed in the present Office Action), such an assertion is a mischaracterization of claim 1. Specifically, claim 1 recites "a wear layer of a UV or electron beam curing lacquer."

Thus, as neither this reference, nor any other cited reference teaches to provide a "a wear layer of a UV or electron beam curing lacquer," Applicants respectfully submit that no *prima facie* case of obviousness has been made.

Applicants note the citation of column 4, lines 11-13 of Schmook for its teaching of including a UV curing laquer. However, as also presented in the Appeal Brief (and not addressed in the present Office Action), this passage teaches "[i]t is possible to employ *an inner layer* which consists of or contains a lacquer and is hardened as a result of exposure to ultraviolet radiation" (emphasis added).

As presented in the Appeal Brief, unlike the invention recited by independent claim 1, there is no *wear layer* of a UV or electron beam curing *lacquer* on top of the leather laminate of Schmoock. Instead, column 4, lines 11-13 relied upon by the Examiner mentions that an *inner layer*, which consists of or contains a lacquer is hardened as a result of exposure to ultra-violet

radiation may be used. Thus, it is clear that it is not a top layer (wear-layer) in Schmoock but, rather, Schmoock only concerns a leather product containing a thermoplastic material which has nothing in common with the present decorative surface element with a specific thermosetting wear layer on top, i.e., a UV or electron beam curing lacquer. Applicants respectfully submit that it is improper for the Examiner to disregard the teachings of Schmoock concerning low-grade leather combined with a thermoplastic material and merely pick out two isolated lines in column 4 as being of the same type of surface or product as being produced by Scher et al. In any event, the teachings of Schmoock at column 4, lines 11-13, do not refer to a wear layer (on top), but, rather, an inner layer as mentioned above. Thus, the combination of Scher et al. and Schmoock would still not teach nor make obvious the invention as claimed in independent claim 1. Thus, as this passage, nor any other passage of the cited reference, teaches or suggests to provide a *wear layer* of UV curing lacquer, Applicants respectfully present that claim 1, and each of the claims depending therefrom are allowable over the cited art.

B. "thereafter completely curing the wear layer"

The Office Action asserts that Scher et al., at column 10, lines 6-18, teaches a step of "thereafter curing the wear layer." Initially, the Office Action has mischaracterized the recited feature, as present claim 1 recites "thereafter completely curing the wear layer." The Office Action has ignored the word "completely."

According to present claim 1, the *wear layer* includes a UV or electron beam curing lacquer. Therefore, in order to cure the UV or electron beam curing lacquer, it is necessary to apply a UV or electron beam. Claim 1 has been amended to clarify this feature. As Scher et al. does not teach or suggest the inclusion of any UV or electron beam curing material, this reference cannot reasonably teach the application of a UV or electron beam. Similarly, as none of the cited references teach or suggest to provide a UV or electron beam curing material as the *wear layer*, it cannot be reasonably asserted that such references, either alone or in combination, teach or suggest to cure the *wear layer* by applying a UV or electron beam.

II. Scher et al. and Schmoock in view of MacQueen et al.

Claims 26-30, 39, 40, 41, 43, 51 and 52 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Scher et al. and Schmoock in view of MacQueen et al. (U.S. Patent No. 6,399,670). Initially, as MacQueen et al. fails to cure the deficiencies identified in Section I.A and I.B, above, Applicants respectfully present that this rejection also fails to establish *prima facie* obviousness for claims 26-30, 39, 40, 41, 43, 51 and 52.

A. Claim 26

The Office Action asserts Scher et al. and Schmoock teach each feature of claim 26, except for "using a specific lacquer." However, as MacQueen et al. allegedly "shows a process including a method wherein the lacquer consists of an acrylic lacquer" (citing column 5, lines 29-31 thereof), the Office Action asserts claim 26 is rendered obvious.

Again, it appears the Examiner is mischaracterizing the claims by ignoring words therein. In this instance, claim 26 recites "wherein the lacquer consists of an acrylic or a maleamide lacquer." While Applicants agree that an acrylate may be a polymer formed from acrylic moieties, an acrylic *resin* (as taught by MacQueen et al.) is not the same as an acrylic *lacquer*. As commonly understood, a lacquer is "A material which contains a substantial quantity of cellulose derivative, most commonly nitrocellulose, but sometimes a cellulose ester, such as cellulose acetate or cellulose butyrate, or a cellulose ether such as ethyl cellulose" (See the definition of lacquer from McGraw-Hill; Dictionary of Scientific and Technical Terms, provided as an Attachment hereto). Thus, as the *resin* described at column 5, lines 29-31 of MacQueen et al. is not described as containing any type of cellulose derivative, such *resin* cannot be a *lacquer*.

B. Claim 27

The Office Action asserts Scher et al. teaches each feature of claim 27, except for "using partial curing steps." However, MacQueen et al. is relied upon for such a teaching, citing column 12, lines 1-16 and column 23, lines 31-34.

Yet again, the Examiner is mischaracterizing the claims by ignoring words therein. While claim 27 recites "wherein the wear layer is applied in several steps with intermediate partial curing," the Office Action only comments on the second feature of claim 27. Thus, as the Office Action does not even allege that the cited references teach or suggest applying the wear layer in several steps, no *prima facie* case of obviousness has been made.

In any event, as claim 27 has been amended to more particularly clarify that there is a curing step, including the application of a UV or electron beam between each applying step. None of the cited references teach or suggest such a feature. Although MacQueen et al. teaches to apply heat to alter viscosity, (1) there is no teaching or suggestion that such application of heat cures; (2) there is no teaching of the application of a UV or electron beam; and (3) there is no teaching of several application steps.

C. Claim 29

The Office Action asserts that MacQueen et al. teaches that a base layer consists of particle board, citing column 9, lines 22-25 thereof. However, neither the cited passage nor any other passage of this reference discloses "a method wherein the base layer consists of a particle board." As none of the cited references teach or suggest to provide a base layer of fiber board, Applicants respectfully present that no *prima facie* case of obviousness has been made, and claim 29 is, accordingly, allowable. Moreover, the alleged motivation, i.e., "to provide a sturdy core layer for the end product," cannot be found in the cited references. Applicants remind the Examiner "[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success *must both be found in the prior art*, not in applicant's disclosure" MPEP § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)) (emphasis added).

III. Scher et al. and Schmoock in view of Petry et al.

Claims 33, 34, 45, 50 and 56-58 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Scher et al. and Schmoock in view of Pety (U.S. Patent No. 3,196,030). However, as Petry fails to cure the deficiencies identified in Section I.A and I.B, above, Applicants respectfully present that this rejection also fails to establish *prima facie* obviousness for claims 33, 34, 45, 50 and 56-58.

IV. Scher et al. and Schmoock in view of Eby et al.

Claims 35-38 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Scher et al. and Schmoock in view of Eby et al. (U.S. Patent No. 5,961,903). Again, as Eby et al. fails to cure the deficiencies identified in Section I.A and I.B, above, Applicants respectfully present that this rejection also fails to establish *prima facie* obviousness for claims 35-38.

A. Claim 37

Claim 37 recites "wherein a thin top coat is applied on top of the structured wear layer before the glazing stage and that the top coat is partially cured before the glazing." However, as Eby et al. does not teach any glazing stages, either in the cited passage or elsewhere, the combination of Scher et al., Schmoock, and Eby et al. cannot make a *prima facie* case of obviousness for claim 37.

B. Claim 38

Claim 38 recites "wherein the top coat is comprised of acrylic or maleamide lacquer and optionally an additive in the form of hard particles with an average size in the range 50 nm - 10μm." However, as Eby et al. does not teach a *lacquer* (see Section I.A, above), the combination of Scher et al., Schmoock, and Eby et al. cannot make a *prima facie* case of obviousness for claim 38.

V. Scher et al. and Schoock in view of Nishimura et al.

Claim 31 stands rejected under 35 USC § 103(a) as allegedly being unpatentable over Scher et al. and Schoock in view of Nishimura et al. (U.S. Patent No. 4,216,251). As Nishimura et al. fails to cure the deficiencies identified in Section I.A and I.B, above, Applicants respectfully present that this rejection also fails to establish *prima facie* obviousness for claim 31.

VI. Scher et al., Schmoock and MacQueen et al. in view of Schmid et al. or or James et al. or Greten et al. or Petry in view of Schmid et al.

Claims 42 and 53 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Scher et al., Schmoock and MacQueen et al. in view of Schmid et al.. Claim 44 stands rejected under 35 USC § 103(a) as allegedly being unpatentable over Scher et al., Schmoock and MacQueen et al. in view of Greten et al. (U.S. Patent No. 5,498,309). Claim 46 and 55 stand rejected under 35 USC § 103 (a) as allegedly being unpatentable over Scher et al., Schmoock and Petry, in further view of Schmid et al. Claim 47-49 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Scher et al., Schmoock and MacQueen et al. in view of James et al. (U.S. Patent No. 6,354,915). Claim 54 stands rejected under 35 USC § 103(a) as allegedly being unpatentable over Scher et al., Schmoock and MacQueen et al. in view of Schmid et al. As Petry, James et al., Schmid et al. and Greten et al. fail to cure the deficiencies identified above, Applicants respectfully present that this rejection also fails to establish *prima facie* obviousness for claims 42, 44, 47-49, 53 and 54.

VII. Conclusion

In view of the above, it is respectfully submitted that all objections and rejections are overcome. Thus, a Notice of Allowance is respectfully requested. If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below

Respectfully submitted,

Reg. No 45,042

Thomas P. Pavelko
Registration No. 31,689

TPP/EPR/mat
Attorney Docket No.: TPP 31424

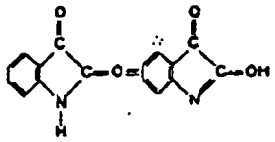
Attachment:
McGraw-Hill Dictionary of Scientific and Technical Terms (definition of Lacquer)

STEVENS, DAVIS, MILLER & MOSHER, L.L.P.
1615 L Street, N.W., Suite 850
Washington, D.C. 20036
Telephone: (202) 785-0100
Facsimile: (202) 408-5200 or (202) 408-5088

Date: March 16, 2006

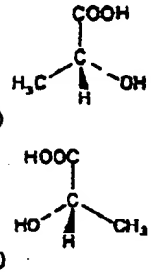
ATTACHMENT

LACTAM



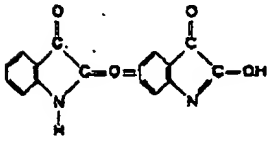
Equation showing conversion of γ-aminobutyric acid to γ-butyrolactam.

LACTIC ACID



Structural formulas of (a) dextro form and (b) levo form of lactic acid.

LACTIM



Equation showing tautomeric equilibrium between the lactam and lactim forms of lactin.

LACTOBACILLEAE

Photomicrograph showing morphology of *Lactobacillus brevis*, tribe Lactobacilleae.

Lacaille's constellations [ASTRON] The 14 southern constellations identified by N. L. de Lacaille in 1763: Antlia, Caelum, Circinus, Crux, Fornax, Horologium, Mensa, Microscopium, Norma, Octans, Pictor, Reticulum, Sculptor, and Telescopium.

laccase [BIOCHEM] $C_{71}H_{11}C_8H_3(OH)_2$ A phenol compound which is found in the sap of lacquer trees, and which can be isolated in crystalline form.

laccase [BIOCHEM] Any of a class of plant oxidases which catalyze the oxidation of phenols.

laccate [BIOL] Having a lacquered appearance.

Laccifertinae [INV ZOO] A subfamily of scale insects in the superfamily Coccoidea in which the male lacks compound eyes, the abdomen is without spiracles in all stages, and the apical abdominal segments of nymphs and females do not form a pygidium.

laccolith [GEOL] A body of igneous rock intruding into sedimentary rocks so that the overlying strata have been notably lifted by the force of intrusion.

lace [ADP] To punch all the holes in some area of a punch card, such as a card row or card column. [TEXT] A patterned, openwork fabric made by hand with needles or hooks, or by machinery.

lacerate [MED] To inflict a wound by tearing.

lacerated [BIOL] Having a deeply and irregularly incised margin or apex.

laceration [MED] A wound made by tearing.

Lacerta [ASTRON] A small northern constellation lying between Cygnus and Andromeda, and adjoining the northern boundary of Pegasus. Also known as Lizard.

Lacertidae [VERT ZOO] A family of reptiles in the suborder Sauria, including all typical lizards, characterized by movable eyelids, a fused lower jaw, homodont dentition, and epidermal scales.

lacheate [ORG CHEM] $C_{20}H_{25}ClNO_3$ A compound that crystallizes from a solution of ethanol and acetone, and whose melting point is 213°C; used in ophthalmology. Also known as chloride benzilate.

lacing [ADP] Extra multiple punching in a card column to signify the end of a specific card run; the term is derived from the lacework appearance of the card. [CIV ENG] 1. A lightweight metallic piece that is fixed diagonally to two channels or four angle sections, forming a composite strut. 2. A course of brick, stone, or tiles in a wall of rubble to give strength. 3. A course of upright bricks forming a bond between two or more arch rings. 4. Distribution steel in a slab of reinforced concrete. 5. A light timber fastened to pairs of struts or walings in the timbering of excavations (including mines).

laciniate [BIOL] 1. Having a fringed border. 2. Narrowly and deeply incised to form irregular lobes, which may be pointed.

lacmus *See* litmus.

lacquer [MATER] A material which contains a substantial quantity of a cellulose derivative, most commonly nitrocellulose but sometimes a cellulose ester, such as cellulose acetate or cellulose butyrate, or a cellulose ether such as ethyl cellulose; used to give a glossy finish, especially on brass and other bright metals.

lacquer diluent [MATER] An organic liquid with no solvent power added to lacquer formulations to reduce viscosity and to adjust flow or other properties.

lacquer tree *See* varnish tree.

lacrimal [ANAT] Pertaining to tears, tear ducts, or tear-secreting organs.

lacrimal apparatus [ANAT] The functional and structural mechanisms for secreting and draining tears; includes the lacrimal gland, lake, puncta, canaliculi, sac, and nasolacrimal duct.

lacrimal bone [ANAT] A small bone located in the anterior medial wall of the orbit, articulating with the frontal, ethmoid, maxilla, and inferior nasal concha.

lacrimal canal *See* nasolacrimal canal.

lacrimal canaliculus [ANAT] A small tube lined with stratified squamous epithelium which runs vertically a short distance from the punctum of each eyelid and then turns horizontally in the lacrimal part of the lid margin to the lacrimal sac. Also known as lacrimal duct.

lacrimal duct *See* lacrimal canaliculus.

lacrimal gland [ANAT] A compound tubuloalveolar gland that secretes tears. Also known as tear gland.

lacrimal sac [ANAT] The dilation at the upper end of the nasolacrimal duct within the medial canthus of the eye. Also known as dacryocyst.

lacrimation [PHYSIO] 1. Normal secretion of tears. 2. Excessive secretion of tears, as in weeping.

lacrimator *See* tear gas.

lacroixite [MINERAL] A pale yellowish-green mineral composed of basic phosphate of aluminum, calcium, manganese, and sodium (often with fluorine), occurring as crystals.

LACT *See* lease automatic custody transfer.

lactalbumin [BIOCHEM] A simple protein contained in milk which resembles serum albumin and is of high nutritional quality.

lactam [ORG CHEM] An internal (cyclic) amide formed by heating gamma (γ) and delta (δ) amino acids; thus γ-aminobutyric acid readily forms γ-butyrolactam lactam (pyrrolidone); many lactams have physiological activity.

lactase [BIOCHEM] An enzyme that catalyzes the hydrolysis of lactose to dextrose and galactose.

lactase deficiency syndrome [MED] Diarrhea induced by ingestion of a lactose-containing food such as milk, secondary to a congenital or acquired deficiency of lactase.

lactate [ORG CHEM] A salt or ester of lactic acid in which the acidic hydrogen of the carboxyl group has been replaced by a metal or an organic radical. [PHYSIO] To secrete milk.

lactate dehydrogenase [BIOCHEM] A zinc-containing enzyme which catalyzes the oxidation of several α-hydroxy acids to corresponding α-keto acids.

lactation [PHYSIO] Secretion of milk by the mammary glands.

lacteal [ANAT] One of the intestinal lymphatics that absorb chyle. [PHYSIO] Pertaining to or resembling milk.

lacteous [BIOL] Having a milky appearance. [PHYSIO] Secreting milk or a milklike substance.

lactic acid [BIOCHEM] $C_3H_6O_3$ A hygroscopic α-hydroxy acid, occurring in three optically isomeric forms: L form, in blood and muscle tissue as a product of glucose and glycogen metabolism; D form, obtained by fermentation of sucrose; and DL form, a racemic mixture present in foods prepared by bacterial fermentation, and also made synthetically. Also known as 2-hydroxypropanoic acid; α-hydroxypropanoic acid.

lactic dehydrogenase [BIOCHEM] An enzyme that catalyzes the dehydrogenation of L-lactic acid to pyruvic acid. Abbreviated LDH.

lactic dehydrogenase virus [VIROL] A virus of the rubella group which infects mice.

lactide [ORG CHEM] A cyclic, intermolecular, double ester formed from α-hydroxy acids; most lactides are relatively low-melting solids and are easily hydrolyzed by base to form salts of the parent acid, such as sodium lactate.

lactim [ORG CHEM] A tautomeric enol form of a lactam with which it forms an equilibrium whenever the lactam nitrogen carries a free hydrogen.

lactin *See* lactose.

lactivorous [ZOO] Feeding on milk.

Lactobacillaceae [MICROBIO] A family of sugar-fermenting bacteria in the order Eubacteriales including both spherical and rod-shaped forms.

Lactobacilleae [MICROBIO] A tribe of rod-shaped bacteria in the family Lactobacillaceae.

Lactobacillus [MICROBIO] The lactic acid bacteria, a genus of nonmotile gram-positive bacteria in the family Lactobacillaceae; they produce lactic acid from certain carbohydrates.

lactoferrin [BIOCHEM] An iron-binding protein found in milk, saliva, tears, and intestinal and respiratory secretions that interferes with the iron metabolism of bacteria; in conjunction with antibodies, it plays an important role in resistance to certain infectious diseases.

lactoflavin *See* riboflavin.

lactogenic hormone *See* prolactin.

lactoglobulin [BIOCHEM] A crystalline protein fraction of milk, which is soluble in half-saturated ammonium sulfate solution and insoluble in pure water.

McGraw-Hill Dictionary of Scientific and Technical Terms

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In addition, material has been drawn from the following references: R. E. Huschke, *Glossary of Meteorology*, American Meteorological Society, 1959; *U.S. Air Force Glossary of Standardized Terms*, AF Manual 11-1, vol. 1, 1972; *Communications-Electronics Terminology*, AF Manual 11-1, vol. 3, 1970; W. H. Allen, ed., *Dictionary of Technical Terms for Aerospace Use*, 1st ed., National Aeronautics and Space Administration, 1965; J. M. Gilliland, *Solar-Terrestrial Physics: A Glossary of Terms and Abbreviations*, Royal Aircraft Establishment Technical Report 67158, 1967; *Glossary of Air Traffic Control Terms*, Federal Aviation Agency; *A Glossary of Range Terminology, White Sands Missile Range, New Mexico*, National Bureau of Standards, AD 467-424; *A DOD Glossary of Mapping, Charting and Geodetic Terms*, 1st ed., Department of Defense, 1967; P. W. Thrush, comp. and ed., *A Dictionary of Mining, Mineral, and Related Terms*, Bureau of Mines, 1968; *Nuclear Terms: A Glossary*, 2d ed., Atomic Energy Commission; F. Casey, ed., *Compilation of Terms in Information Sciences Technology*, Federal Council for Science and Technology, 1970; *Glossary of Stinfo Terminology*, Office of Aerospace Research, U.S. Air Force, 1963; *Naval Dictionary of Electronic, Technical, and Imperative Terms*, Bureau of Naval Personnel, 1962; *ADP Glossary*, Department of the Navy, NAVSO P-3097.

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